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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/775,274

01/31/2001

Shai Mohaban

60002-0505

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7590

06/04/2004

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EXAMINER

MILLS, DONALD L

ART UNIT

PAPER NUMBER

2662

5

DATE MAILED: 06/04/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/775,274

Applicant(s)

MOHABAN ET AL.

Examiner

Donald L. Mills

Art Unit

2662

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 January 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-35 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>4</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 7-27, 29, and 30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 7, the claim specifies "a reduced sensitivity" (See claim 7, line 3.) It is unclear from the context of the claim what constitutes a *reduced sensitivity* since no comparative basis is established.

Regarding claim 29, the term "sufficient" is a relative term which renders the claim indefinite. The term "sufficient" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Therefore, "Real-Time Protocol segments" are rendered indefinite by use of the term *sufficient*.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an

Art Unit: 2662

international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1-4, 7-11, 28-31, and 33-35 are rejected under 35 U.S.C. 102(e) as being anticipated by Goldberg et al. (US 6,389,038 B1), hereinafter referred to as Goldberg.

Regarding claims 1 and 33-35, Goldberg discloses a method for combing packets into a SuperPacket to improve the utilization of a channel, which comprises:

Aggregating two or more media packets from the two or more concurrent calls originating from one or more source end points into an aggregated media payload (Referring to Figure 3, MUX 230 combines the packets and sends them as a single larger packet containing the voice for all 25 channels, supporting multiple concurrent calls from the endpoints. See column 3, lines 49-51.)

Re-packetizing the aggregated media payload using a single aggregated header to form an aggregated media packet (Referring to Figure 3, each superpacket contains 8 control bytes. see column 4, line 51.)

Forwarding the aggregated media packet to a next hop in the packet-switched network (Referring to Figure 3, MUX 230 forwards the superpacket to router 210.)

Regarding claim 2, Goldberg discloses *de-aggregating the aggregated media payload for one or more destination endpoints by separating the aggregated media payload to result in creating and sending restored copies of the two or more media packets, each media packet corresponds to one of the two or more concurrent calls* (Referring to Figure 3, MUX 230 disassembles SuperPackets, which results in sending the restored packets which are the calls placed by the endpoints. See column 5, lines 42-43.)

Art Unit: 2662

Regarding claim 3, Goldberg discloses *one or more headers of each media packet* (Referring to Figure 3, each UDP/IP packet has its own UDP/IP header. See column 3, line 10.)

Regarding claim 4, Goldberg discloses *the two or more media packets are Real-Time protocol (RTP) packets* (Referring to Figure 3, the packets are voice over IP packets. See column 2, lines 63-64.)

Regarding claim 7, Goldberg discloses *forming the aggregated media payload according to an aggregation protocol that has a reduced sensitivity to media packet loss for aggregating the two or more media packets* (Referring to Figure 3, each SuperPacket contains 8 control bytes, which contains a 4 bit sequence number for frame loss detection. See column 4, lines 51-53.)

Regarding claim 8, Goldberg discloses *forming the aggregated media payload based on an aggregated media packet format for each aggregated media packet wherein the aggregated media packet format comprises a version field indicating a version of the aggregation protocol* (Referring to Figure 3, two bits per channel of the overhead indicate the number of regular packets that are consolidated into the SuperPacket. See column 4, lines 55-56.)

Regarding claim 9, Goldberg discloses *forming the aggregated media payload based on an aggregated media packet format for each aggregated media packet wherein the aggregated media packet format comprises a placeholder field that reserves packet space for future use* (Referring to Figure 3, 4 bits are reserved of the SuperPacket header. See column 4, line 53.)

Regarding claim 10, Goldberg discloses *forming the aggregated media payload based on an aggregated media packet format for each aggregated media packet wherein the aggregated media packet format comprises a sequence number field that is incremented for each aggregated media packet and is used to detect media packet loss* (Referring to Figure 3, the first 4 bytes of

Art Unit: 2662

the SuperPacket contain a 4 bit sequence number for frame loss detection. See column 4, lines 51-53.)

Regarding claim 11, Goldberg discloses *forming the aggregated media payload based on an aggregated media packet format for each aggregated media packet wherein the aggregated media packet format comprises a trunk ID field that uniquely identifies a corresponding trunk* (Referring to Figure 3, each UDP/IP packet has its own UDP/IP header with a destination address. See column 3, lines 10-11.)

Regarding claim 28, Goldberg discloses *the two or more media packets are received while traversing a common sub-route* (Referring to Figure 3, the packets are routed to MUX 230 traversing the same link from router 210.)

Regarding claim 29, Goldberg discloses *transmitting the aggregated media packet when the aggregated media packet contains a sufficient number of Real-Time Protocol segments* (Referring to Figure 3, smaller voice packets are concatenated into a larger packet that does not exceed the maximum Internet frame size is transmitted. See column 4, lines 44-46.)

Regarding claim 30, Goldberg discloses *the sufficient number of Real-Time Protocol segments is a user-selected number* (Referring to Figure 3, the maximum number of channels per SuperPacket is set to 15. See column 4, lines 46-47.)

Regarding claim 31, Goldberg discloses *transmitting the aggregated media packet when a maximum allowed delay time value is reached* (Referring to Figure 3, packets are combined into a SuperPacket and are sent out immediately which is the maximum allowed delay time. See column 7, lines 19-20.)

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 5, 12, 14, 16, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US 6,389,038 B1), hereinafter referred to as Goldberg, in view of Vargo et al. (US 6,477,164 B1), hereinafter referred to as Vargo.

Regarding claim 5 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further teaches *encapsulating the two or more segments with the single aggregated header* (Referring to Figure 3, packets are combined into a superpacket which contains 8 control bytes. see column 4, line 51.)

Goldberg does not disclose *compressing an IP header and a UDP header of each RTP packet to form a corresponding uncompressed RTP segment*.

Vargo teaches creating a transmux voice packet **144** by striping off the destination transmux address **308** from the gateway subpackets **302**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the real-time data transmission of Vargo in the system of Vargo. One of ordinary skill in the art would have been motivated to do so in order to minimize the transmission latency of the superpacket as taught by Vargo (See column 2, lines 3-6.) An added benefit is the reduction in discontinuous and choppy sounding conversations.

Art Unit: 2662

Regarding claim 12 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further teaches *a context ID field indicating a session context ID for the segment* (Referring to Figure 3, the UDP/IP has its own UDP/IP header which by definition comprises an 8-bit type of service field.)

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time Protocol segment of the two or more media packets.*

Vargo teaches creating a transmux voice packet 144 by striping off the destination transmux address 308 from the gateway subpackets 302.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the real-time data transmission of Vargo in the system of Vargo. One of ordinary skill in the art would have been motivated to do so in order to minimize the transmission latency of the superpacket as taught by Vargo (See column 2, lines 3-6.) An added benefit is the reduction in discontinuous and choppy sounding conversations.

Regarding claim 14 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further teaches *the two or more media packets comprising a placeholder field for future use* (Referring to Figure 3, 4 bits are reserved of the SuperPacket header. See column 4, line 53.)

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets.*

Art Unit: 2662

Vargo teaches creating a transmux voice packet 144 by striping off the destination transmux address 308 from the gateway subpackets 302.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the real-time data transmission of Vargo in the system of Vargo. One of ordinary skill in the art would have been motivated to do so in order to minimize the transmission latency of the superpacket as taught by Vargo (See column 2, lines 3-6.) An added benefit is the reduction in discontinuous and choppy sounding conversations.

Regarding claim 16 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *including a full length field containing a length of a Real-Time Protocol packet that corresponds to the Real-Time Protocol Segment* (Referring to Figure 3, the UDP/IP has its own UDP/IP header which by definition comprises data field which corresponds to the length of the packet payload.)

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets.*

Vargo teaches creating a transmux voice packet 144 by striping off the destination transmux address 308 from the gateway subpackets 302.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the real-time data transmission of Vargo in the system of Vargo. One of ordinary skill in the art would have been motivated to do so in order to minimize the

Art Unit: 2662

transmission latency of the superpacket as taught by Vargo (See column 2, lines 3-6.) An added benefit is the reduction in discontinuous and choppy sounding conversations.

Regarding claim 18 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *a padding field that aligns an end of the Real-Time Protocol segment with a next four-byte boundary* (Referring to Figure 3, each superpacket contains 8 control bytes which separates each SuperPacket. see column 4, line 51.)

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets.*

Vargo teaches creating a transmux voice packet **144** by striping off the destination transmux address **308** from the gateway subpackets **302**.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the real-time data transmission of Vargo in the system of Vargo. One of ordinary skill in the art would have been motivated to do so in order to minimize the transmission latency of the superpacket as taught by Vargo (See column 2, lines 3-6.) An added benefit is the reduction in discontinuous and choppy sounding conversations.

7. Claims 6, 13, 17, 19, 20, and 22-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US 6,389,038 B1), hereinafter referred to as Goldberg, in view of Koodli (US 6,608,841 B1).

Art Unit: 2662

Regarding claim 6 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further teaches *encapsulating the two or more segments with the single aggregated header* (Referring to Figure 3, packets are combined into a superpacket which contains 8 control bytes. see column 4, line 51.)

Goldberg does not disclose *compressing an IP header, a UDP header, and an RTP header of each RTP packet to form a corresponding compressed RTP segment*.

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header-overhead resulting in a compressed or uncompressed RTP datagram (See column 6, lines 33-34.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 13 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets that comprises a compression bit indicating whether the uncompressed Real-Time Protocol segment is uncompressed*.

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in an uncompressed or compressed RTP segment as indicated by the packet

Art Unit: 2662

type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 17 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on an uncompressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets that comprises a Real-Time Protocol payload and a Real-Time Protocol header corresponding to a Real-Time Protocol packet that in turn corresponds to the uncompressed Real-Time Protocol segment.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in an uncompressed or compressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Art Unit: 2662

Regarding claim 19 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *a context ID field indicating a session context ID for the Real-Time Protocol segment* (Referring to Figure 3, the UDP/IP has its own UDP/IP header which by definition comprises an 8-bit type of service field.)

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 20 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on an compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets that comprises a Real-Time Protocol header extension*

Art Unit: 2662

bit indicating whether a Real-Time Protocol header extension appears in the compressed Real-Time protocol segment.

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 22 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *comprising a Real-Time Protocol header marker bit* (Referring to Figure 3, each SuperPacket contains 8 control bytes, the first bit indicating the beginning of the control byte sequence. See column 4, line 51.)

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

Art Unit: 2662

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 23 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *including a full length field containing a length of a Real-Time Protocol packet that corresponds to the Real-Time Protocol Segment* (Referring to Figure 3, the UDP/IP has its own UDP/IP header which by definition comprises data field which corresponds to the length of the packet payload.)

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Art Unit: 2662

Regarding claim 24 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets that comprises a sequence number field carrying a Real-Time Protocol header sequence number.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.) Koodli further teaches a sequence field indicating the Real-Time Protocol header sequence (See column 10, line 31.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 25 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets that comprises a timestamp field carrying a Real-Time Protocol header timestamp.*

Art Unit: 2662

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.) Koodli further teaches a timestamp field which corresponds to a Real-Time Protocol header timestamp (Refer to Figure 4 and see column 10, line 54.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 26 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim).

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each compressed Real-Time protocol segment of the two or more media packets that comprises a Real-Time Protocol payload and a Real-Time Protocol header corresponding to a Real-Time Protocol packet that in turn corresponds to the compressed Real-Time Protocol segment.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg.

Art Unit: 2662

One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

Regarding claim 27 as explained above in the rejection statement of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *a padding field that aligns an end of the Real-Time Protocol segment with a next four-byte boundary* (Referring to Figure 3, each superpacket contains 8 control bytes which separates each SuperPacket. see column 4, line 51.)

Goldberg does not disclose *forming the aggregated media payload based on a compressed Real-Time Protocol segment format for each uncompressed Real-Time protocol segment of the two or more media packets.*

Koodli teaches compressing headers of IP/UDP/RTP datagrams to reduce header overhead resulting in a compressed or uncompressed RTP segment as indicated by the packet type field which identifies the type of the packet, compressed header or full header (See column 10, lines 33-35.)

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the header compression method of Koodli in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to increase quality of VoIP service for bandwidth limited links by reducing the amount of redundant overhead.

8. Claim 32 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goldberg et al. (US 6,389,038 B1), hereinafter referred to as Goldberg, in view of Woodward et al. (US 6,151,318), hereinafter referred to as Woodward.

Art Unit: 2662

Regarding claim 32 as explained above in the rejection of claim 1, Goldberg discloses all of the claim limitations of claim 1 (parent claim). Goldberg further discloses *using a maximum allowed delay time value for transmitting the aggregated media packet* (Referring to Figure 3, packets are combined into a SuperPacket and are sent out immediately which is the maximum allowed delay time. See column 7, lines 19-20.)

Goldberg does not disclose *starting a count down for the maximum allowed delay time value when a first media packet arrives for aggregation and aggregating subsequent media packets that arrive before the maximum allowed delay time value is reached.*

Woodward teaches a time **420** which is configured such that each time the cells are received, timer **420** begins a new count sequence. And, if the count sequence completes prior to additional cells being received, the terminal count output of timer **420** is asserted to output the aggregated cells.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to implement the timer of Woodward in the system of Goldberg. One of ordinary skill in the art would have been motivated to do so in order to ensure low latency of data for time sensitive traffic. An added benefit would include minimizing buffer time.

Allowable Subject Matter

9. Claims 15 and 21 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Art Unit: 2662

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donald L Mills whose telephone number is 703-305-7869. The examiner can normally be reached on 8:00 AM to 4:30 PM.

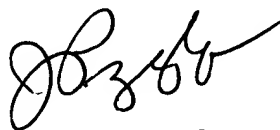
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hassan Kizou can be reached on 703-305-4744. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Donald L Mills



May 28, 2004



**JOHN PEZZLO
PRIMARY EXAMINER**